Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

Approved for use through xx/xx/200x. OMB 0651-00xx

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

is request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The Applicant/Inventor Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record (Reg. No.) Typed or printed name			Docket Number (Optional)	
10/616,224 July 10, 2003 First Named Inventor LUNDBERG Art Unit Examiner Vyas, Abhisek pplicant requests review of the final rejection in the above-identified application. No amendments are being filed the this request. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The review is requested for the reason(s) stated on the attached sheet(s). Signature John R. Lastova Typed or printed name Attorney or agent of record Reg. No.) Typed or printed name	PRE-APPEAL BRIEF REQUEST F	OR REVIEW	JRL-4010-30	
First Named Inventor LUNDBERG Art Unit Examiner Vyas, Abhisek 3609 Policant requests review of the final rejection in the above-identified application. No amendments are being filed the this request. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The policant/Inventor Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record (Reg. No.) Typed or printed name 703-816-4025	AP	Application Number	Filed	
Art Unit Saminer Vyas, Abhisek 3609 Art Unit Saminer Vyas, Abhisek 260 Art Unit Saminer Vyas, Abhisek 270 Assignest is being filed with a notice of appeal. Assignest is being filed with a notice of appeal. Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record 33,149 (Reg. No.) 703-816-4025	5 0010 N		July 10, 2003	
policant requests review of the final rejection in the above-identified application. No amendments are being filed the this request. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The Applicant/Inventor Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record (Reg. No.) Typed or printed name 703-816-4025	0 5 2010			
policant requests review of the final rejection in the above-identified application. No amendments are being filed the this request. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The Applicant/Inventor Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record (Reg. No.) Typed or printed name 703-816-4025	A DEMARK	Art Unit Examiner		
th this request. this request is being filed with a notice of appeal. the review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The provided of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record 33,149 (Reg. No.) Typed or printed name 703-816-4025	HAUEI	3609	Vyas, Abhisek	
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. The Applicant/Inventor Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record (Reg. No.) Typed or printed name	vith this request.			
Note: No more than five (5) pages may be provided. Important the Applicant/Inventor Signature Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record 33,149 (Reg. No.) Typed or printed name	This request is being filed with a notice of appeal.			
Applicant/Inventor Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record (Reg. No.) Signature John R. Lastova Typed or printed name 703-816-4025	,	` *		
Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Attorney or agent of record (Reg. No.) John R. Lastova Typed or printed name	am the	Att	Factore	
C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Typed or printed name Attorney or agent of record (Reg. No.) 703-816-4025	Applicant/Inventor		Signature	
Attorney or agent of record 33,149 (Reg. No.) Typed or printed name 703-816-4025	C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73		John R. Lastova	
(Reg. No.) 703-816-4025	<u> </u>	T	yped or printed name	
			702 946 4025	
REGULESTERS TELEPROPER OF THE PROPERTY OF THE		Regi	ester's telephone number	
requesters telephone number		rtequ		
Attorney or agent acting under 37CFR 1.34. March 5, 2010	Attorney or agent acting under 37CFR 1.34.			
Registration number if acting under 37 C.F.R. § 1,34 Date	Registration number if acting under 37 C.F.R. § 1,34		Date	
IOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are equired. Submit multiple forms if more than one signature is required, see below.*	•		•	
*Total of 1 form/s are submitted.	★ Total of 1 form/s are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and selection option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

LUNDBERG et al.

Appl. No. 10/616,224

Filed: July 10, 2003

MAR 0 5 2010

4010-30; Confirmation No. 3375

TC/A.U. 3609

Examiner: Vyas, Abhisek

For: A METHOD AND A SYSTEM FOR TRADING STRIPPED BONDS

March 5, 2010

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Overview

The claims in this case are directed to an automated trading apparatus for matching bids and offers for fixed income instruments entered by a number of traders. The automated exchange is designed to link the trading in bonds (a first type of fixed income instrument) with trading in stripped bonds (a second type of fixed income instrument). The system makes use of this link or relationship between bonds and stripped bonds to generate derived orders (sometimes referred to as "baits") in the stripped bond market using the existing prices on bonds. The derived order is generated by the system—it is not an explicit order received from a trader—in response to orders placed in the orderbook by traders to increase liquidity. By linking the bond market and the stripped bond market in this fashion, increased liquidity is provided to both the bond and stripped bond markets thereby providing more trading opportunities.

To assist in understanding, but not for limitation, consider the following derived order example. Trader A wants to buy IBM and sell Google only under the condition that both orders are executed. A combination orderbook is created to buy IBM and sell Google. Trader B wants to sell IBM, and therefore inputs a sell order in an IBM order book. The system can now create a new implied order (a bait or derived order) based on Trader A's order in the "buy IBM and sell Google" orderbook and Trader B's sell order in the IBM orderbook. The implied order created is

a buy order in the Google orderbook. Trader C then trades the bait order. The system will then "unwind the combination trade" by matching Trader A's order in the "buy IBM and sell Google" combination order book against Trader B's sell order in the IBM order book and Trader C's order in the Google order book. In this way, new orders are generated that create more matching opportunities, and ultimately, increase liquidity.

<u>Clear Error #1</u>: Narayan and Roberts Do Not Create "a new derived order in a bond orderbook for a bond derived from one or more orders placed in a stripped bond orderbook for stripped bonds associated with the bond"

Claim 1 recites a matching processor and a data processing module that creates "a new derived order in a bond orderbook for a bond derived from one or more orders placed in a stripped bond orderbook for stripped bonds associated with the bond in order to increase trade matching opportunities in the bond orderbook." As defined earlier in the claim, fixed-income instruments paying a coupon are referred to as bonds, and fixed-income instruments not paying a coupon are referred to as stripped bonds.

Narayan discloses a trading system where a trader has the possibility to group instruments together into "security pools." A market participant can construct a pool of securities, such as fixed income securities, based on different investment parameters and place orders for units of any security that matches the characteristics of the securities pool. Narayan is focused on "automatically or electronically searching a database of commodity parameters to locate particular commodities having the specified parameter." See paragraph 0013. Although fixed income security instruments are identified, all that is described is that the specified parameter for such an instrument is "taken from a group including tax, status, redemption features, credit quality, coupon rate, payment schedule, and maturity."

The Examiner admits that Narayan fails to disclose the claimed data processing module and turns to Roberts. Roberts describes <u>creating</u> zero coupon <u>bonds</u> from a debt issue. More specifically, a data processing system implements a debt-for-debt exchange to restructure an issuer's existing debt issue into a new serial issue of callable zero coupon bonds so that debt service payments after the exchange are substantially equivalent to debt service payments prior to the exchange. Col. 3, lines 13-20 makes this clear, e.g., "physically exchanging a newly issued series of zero coupon bonds for the outstanding bonds," as does col. 4, lines 44-45, "means to print the new serial issue of zero coupon bonds." But claim 1 is not related to <u>creating</u>

bond strips/zero coupon bonds. Rather, claim 1 is directed to <u>creating a new derived order</u> in a bond orderbook for a bond derived from one or more orders placed in a stripped bond orderbook for stripped bonds associated with the bond in order to increase trade matching opportunities in the bond orderbook. Neither Narayan nor Roberts disclose or suggest these features from claim 1.

Nor is the Examiner's motivation to combine Narayan with Roberts articulated on page 3 of the final office action reasonable. The Examiner argues expanding Narayan to include "deriving bond prices," but that is not the same as creating a new derived bond order in a bond orderbook derived from a stripped bond order in a stripped bond orderbook. Col. 3, lines 40-62 of Roberts, cited by the Examiner as motivation, describes determining call yields for the zero coupon bonds "so that the effect of calling the entire issues of new bonds is equivalent to the effect of calling the old bond." It is not understood how this supports the Examiner motivation contention.

The Examiner states at the end of page 3 of the office action that "trading zero-coupon bonds or stripped bonds is analogous to trading bonds. Zero coupon bonds are a subset of coupon bonds." It is not understood how these statements are relevant to what is recited in claim 1 where the relation between the zero coupon bonds and the bond is used to create a new derived order for the bond derived from multiple existing zero coupon bond orders in order to increase trade matching opportunities. Claim 1 does not recite using the zero coupon bonds to determine a price of the bond.

<u>Clear Error #2</u>: Narayan and Mosler Do Not Match a Bond Order Against a Number of Aggregated Stripped Bonds

Regarding claims 2 and 7, the Examiner admits that Narayan fails to disclose "matching said bond order against a number of stripped bonds that aggregated forms a bond corresponding to said bond order." For this missing feature, the Examiner relies on Mosler at 22:55-63, 23:20-23, 36-50, 24:56-67, 25:29-36, and Figs. 5a, 5b. Mosler relates to trading interest rate swaps (IRSs), and the identified sections from Mosler relate to pricing. But the Examiner confuses the claimed matching with pricing a swap contract. Claim 2 recites matching a bond order to buy or sell a bond against a number of stripped bonds (which are different types of instruments from bonds) that when aggregated form a bond corresponding to the bond order. Accordingly, even if Narayan and Mosler could be combined, they fail to disclose "matching said bond order against a number of strip bonds that aggregated forms a bond corresponding to said bond order."

The Examiner opines in the last paragraph on page 4 of the final office action that Mosler's column 22, lines 59-63 supports four motivations to "expand the system of Narayan to specifically incorporate various units of securities that match characteristics of the bond order and the available securities within the system." First, this generalized "expansion" does not result in what is specifically recited in claims 2 and 7. Second, Mosler's column 22, lines 59-63 describes how to price an IRS by creating a yield curve using different contracts listed against separate bonds with maturities at various points on the yield curve. There is no teaching of the motivations offered up by the Examiner.

Clear Error #3: Narayan, Halpern, and Roberts Do Not Render Obvious Claims 6 and 11

Regarding claims 6 and 11, Halpern describes creating investment structures to help satisfy a particular investor's needs [0016]. As with Roberts, claims 6 and 11 are not directed to creating instruments or investment structures. None of Narayan, Roberts, nor Halpern discloses or suggest: "generating a derived bond order based on a number of stripped bond orders" and "forming a combination trade match between all of the number stripped bonds required for a match against said bond order including said stripped bond order and said bond," as recited in claim 6. Generating a derived bond order based on a number of stripped bond orders is not the same thing as creating a new serial issue of zero coupon bonds as in Roberts. Regarding the claimed forming a combination trade match step, [0022] of Halpern (identified by the Examiner) describes investing in bonds and strips in a staggered 5-year manner. [0025] mentions matching strips to coupon bonds but that is not orderbook matching. Indeed, [0016] clarifies that matching means something different and is in the context of "maintaining the investment structure," i.e., "matching the secondary investment vehicle to the primary investment vehicle to maintain a consistent level of reinvestment." This is not a trade match. [0028] indicates that municipal bond income is exempt from Federal income tax and that zero coupons are not actively traded. None of these paragraphs identified by the Examiner describes the claimed forming a combination trade match using a derived bond order generated based on a number of stripped bond orders.

The rationale for combining the three references is based on an improper hindsight reconstruction argument. First, the combining is implausible because the supporting Roberts and Halpern references do not teach what the Examiner contends they teach. For example, Halpern does not teach forming the claimed combination trade match. Second, the Examiner never

explains how generating a derived order based on a number of stripped bond orders "realize[s] benefits of coupon stripping and realizing the profits upon redeeming such securities" in Narayan—let alone where that feature is taught in Roberts.

For claim 11, the Examiner never explains how Narayan is to be "expanded" using Halpern. Indeed, Halpern is not even mentioned at the Examiner's rationale paragraph at the bottom of page 7.

Dependent Claims

Dependent claims 12 and 13 are missing from Narayan, Mosler, and Halpern. Halpern's creation and maintenance of an investment structure does not teach "storing in a bond orderbook the bond order received from a trader to buy or sell a bond, and aggregating the number of stripped bonds in a stripped bond orderbook in response to the bond order, wherein the matching includes matching the bond order with the aggregated number of stripped bonds which form the bond corresponding to the bond order."

Nor is it seen where the features of dependent claims 4 and 9 are described in Narayan and Mosler. The Examiner refers to Mosler, column 24, lines 28-34, where the following is stated: "The daily settlement could be based on either traded prices as conventionally done in other contracts, or on a model price...." The Examiner misinterprets these claims which describe that when a bond order is received, a check is made if there is a matching opportunity by combining orders in bond strip orderbooks that constitute the bond. Neither reference checks to make sure before such a match is made that there is a "current price for all required stripped bonds" in the aggregate number.

The final rejections should be withdrawn and the application passed to allowance.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:

John R. Lastova Reg. No. 33,149

JRL: maa

901 North Glebe Road, 11th Floor

Arlington, VA 22203-1808 Telephone: (703) 816-4000